

Serial No. 09/491,353

Attorney Dkt No. 06618-505001/CIT-3061

## REMARKS

Claims 2-3, 6-8, 10-11, 14-16, 18-19 and 22-32 are cancelled. Claims 1, 4, 9, 12, 17 and 20-21 have been amended. Independent claims 1, 9, and 17 now better define the patentable distinctions of the claimed subject matter. Support for this amendment can be found throughout the application as filed, and in particular, in the Abstract, in the Summary, and in the detailed description (e.g., at page 9, lines 12-13 and at page 40, lines 10-17).

The art of record fails to teach or suggest: "modeling an initial geometry of a shell; characterizing an environment for the shell, including environmental factors affecting mechanical behavior of the modeled shell, the environmental factors including loading conditions, material properties, and boundary conditions for the modeled shell, and the loading conditions including an indication of applied forces; computing by a computer a mechanical response of the modeled shell, taking into account the environmental factors, using a finite element analysis to compute a deformed geometry of the modeled shell, including generating smooth interpolated displacement fields possessing bounded energy according to a nonlocal subdivision-surfaces-based interpolation scheme, without using nodal rotations, such that resulting displacement fields defined over overlapping patches combine conformingly to define a limit

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surface; and outputting a description of the deformed geometry of the modeled shell as determined from the computed mechanical response."

Thus, independent claims 1, 9, and 17 are patentable. Moreover, dependent claims 4-5, 12-13, and 20-21 are patentable based on the above, and on there own merits.

It is believed that all of the pending claims have been addressed in this paper. However, failure to address a specific rejection, issue or comment, does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above are not intended to be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

In view of the above amendments and remarks, therefore, all of the claims should be in condition for allowance. A formal notice to that effect is respectfully solicited.

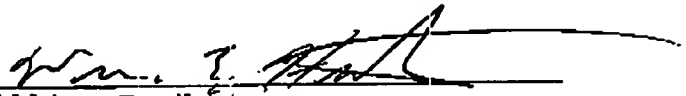
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Respectfully submitted,

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